

Precision Temperature & Humidity Control



Computer Room Air Conditioning (CRAC) Dual Circuit, Direct Expansion, Perimeter Mounted

With applications expertise and a wide array of solutions and services, Trane—a holistic provider—can help ensure mission critical facilities are highly reliable, efficient and sustainable. Trane perimeter air conditioners are available in down-flow and up-flow configurations.

- State-of-the-art microprocessor controller with a range of Building Management Systems interface options
- DX systems provided with highly efficient and reliable low noise scroll compressors
- Single or multi-stage compressor arrangement including tandem configurations
- Micro Plate Heat Exchangers offer major improvements in heat transfer
- Optimized AWS/Free-cooling coils to match DX cooling capacities, increasing energy savings
- Multiple EC Fan options
- All EC Fans mounted in the cabinet meet full performance without being dropped into raised floor
- Refrigeration-based dehumidification system effectively removes excess moisture
- Dehumidification efficiently achieved through reduced air volume at maximum cooling
- Standard and seismic rated floor stands available



Technical Data

CRAC		
Dual Circuit, Direct Expansion, Perimeter Mounted		
Capacity	kW	21 - 105
	MBH	72 - 358
	Tons	6 - 30
Air Flow	CFM	6,000 - 15,750

Technical Data

Air Cooled								
Model: TR-CFD/U-	021-D2A	028-D2A	035-D2A	042-D2A	053-D2A	070-D2A	088-D2A	105-D2A
NET DX COOLING CAPACITY - (Includes Motor Heat @ Rated CFM & ESP)								
80°FDB/62.9°FWB, 38% RH, 52.3°FDP								
Total, kW (MBH)	27.1 (92)	31.4 (107)	34.4 (117)	40.1 (136)	51.6 (176)	65.6 (224)	89.7 (306)	99.1 (338)
Sensible, kW (MBH)	27.1 (92)	31.4 (107)	34.4 (117)	40.1 (136)	51.6 (176)	64.1 (218)	89.7 (306)	99.1 (338)
72°FDB/60.0°FWB, 50% RH, 52.3°FDP								
Total, kW (MBH)	24.0 (82)	28.5 (97)	31.8 (108)	35.1 (120)	46.4 (158)	62.1 (212)	80.9 (276)	92.4 (315)
Sensible, kW (MBH)	23.2 (79)	27.8 (95)	30.2 (103)	33.6 (114)	42.0 (143)	58.3 (199)	77.3 (263)	88.1 (300)
Evaporator Blower / Motor - Backward Inclined Direct Driven EC								
Rated Air Flow, CFM @ .2 in. H ₂ O ESP	6,000	6,000	6,000	8,000	9,000	10,000	15,750	15,750
Unit Dimensions, H" x W" x D"								
Down-Flow	76.2 x 77.4 x 40.3	76.2 x 77.4 x 40.3	76.2 x 77.4 x 40.3	76.2 x 89.1 x 40.3	76.2 x 89.1 x 40.3	76.0 x 87.3 x 38.4	76.0 x 118.4 x 40.3	76.0 x 118.4 x 40.3
Up-Flow	88.1 x 77.4 x 40.3	88.1 x 77.4 x 40.3	88.1 x 77.4 x 40.3	88.1 x 88.2 x 40.3	88.1 x 88.2 x 40.3	88.1 x 88.2 x 40.3	88.1 x 118.4 x 40.3	88.1 x 118.4 x 40.3
Up-Flow with Hot Gas/Water Reheat	91.1 x 77.4 x 40.3	91.1 x 77.4 x 40.3	91.1 x 77.4 x 40.3	91.1 x 88.2 x 10.3	91.1 x 88.2 x 40.3	91.1 x 88.2 x 40.3	91.1 x 118.4 x 40.3	91.1 x 118.4 x 40.3

Water Cooled								
Model: CFD/U-	021-D2W	028-D2W	035-D2W	042-D2W	053-D2W	070-D2W	088-D2W	105-D2W
NET DX COOLING CAPACITY - (Includes Motor Heat @ Rated CFM & ESP)								
80°FDB/62.9°FWB, 38% RH, 52.3°FDP								
Total, kW (MBH)	29.9 (102)	34.7 (118)	38.1 (130)	44.5 (152)	56.8 (194)	74.1 (252)	Consult Factory	110.4 (376)
Sensible, kW (MBH)	29.9 (102)	34.7 (118)	38.1 (130)	44.5 (152)	56.8 (194)	73.5 (250)	Consult Factory	110.4 (376)
72°FDB/60.0°FWB, 50% RH, 52.3°FDP								
Total, kW (MBH)	26.9 (91)	32.3 (110)	35.8 (122)	39.9 (136)	52.9 (180)	69.7 (237)	Consult Factory	104.8 (357)
Sensible, kW (MBH)	26.9 (91)	30.5 (104)	30.4 (103)	39.0 (133)	50.2 (171)	54.1 (184)	Consult Factory	93.1 (317)
Evaporator Blower / Motor - Backward Inclined Direct Driven EC								
Rated Air Flow, CFM @ .2 in. H ₂ O ESP	6,000	6,000	6,000	8,000	9,000	10,000	Consult Factory	15,750
Unit Dimensions, H" x W" x D"								
Down-Flow	76.2 x 77.4 x 40.3	76.2 x 77.4 x 40.3	76.2 x 77.4 x 40.3	76.2 x 89.1 x 40.3	76.2 x 89.1 x 40.3	76.2 x 89.1 x 40.3	Consult Factory	76.2 x 118.4 x 40.3
Up-Flow	88.1 x 77.4 x 40.3	88.1 x 77.4 x 40.3	88.1 x 77.4 x 40.3	88.1 x 88.2 x 40.3	88.1 x 88.2 x 40.3	88.1 x 88.2 x 40.3	Consult Factory	88.0 x 118.4 x 40.3
Up-Flow with Hot Gas/Water Reheat	91.1 x 77.4 x 40.3	91.1 x 77.4 x 40.3	91.1 x 77.4 x 40.3	91.1 x 88.2 x 40.3	91.1 x 88.2 x 40.3	91.1 x 88.2 x 40.3	Consult Factory	91.0 x 118.4 x 40.3

Glycol Cooled								
Model: CFD/U-	021-D2G	028-D2G	035-D2G	042-D2G	053-D2G	070-D2G	088-D2G	105-D2G
NET DX COOLING CAPACITY - (Includes Motor Heat @ Rated CFM & ESP)								
80°FDB/62.9°FWB, 38% RH, 52.3°FDP								
Total, kW (MBH)	26.3 (89)	30.5 (104)	33.4 (114)	38.8 (132)	50.1 (171)	63.9 (218)	87.1 (297)	96.2 (328)
Sensible, kW (MBH)	26.3 (89)	30.5 (104)	33.4 (114)	38.8 (132)	50.1 (171)	63.9 (218)	87.1 (297)	96.2 (328)
72°FDB/60.0°FWB, 50% RH, 52.3°FDP								
Total, kW (MBH)	23.2 (79)	27.4 (93)	30.7 (104)	34.0 (116)	44.9 (153)	59.8 (204)	78.3 (267)	89.0 (303)
Sensible, kW (MBH)	23.2 (79)	27.2 (92)	29.5 (100)	34.0 (116)	44.3 (151)	57.0 (194)	78.3 (267)	85.9 (293)
Evaporator Blower / Motor - Backward Inclined Direct Driven EC								
Rated Air Flow, CFM @ .2 in. H ₂ O ESP	6,000	6,000	6,000	8,000	9,000	10,000	15,750	15,750
Unit Dimensions, H" x W" x D"								
Down-Flow	76.2 x 77.4 x 40.3	76.2 x 77.4 x 40.3	76.2 x 77.4 x 40.3	76.0 x 89.1 x 38.4	76.2 x 89.1 x 40.3	76.2 x 89.1 x 40.3	76.2 x 118.4 x 40.3	76.2 x 118.4 x 40.3
Up-Flow	88.1 x 77.4 x 40.3	88.1 x 77.4 x 40.3	88.1 x 77.4 x 40.3	88.1 x 89.1 x 40.3	88.1 x 89.1 x 40.3	88.1 x 89.1 x 40.3	88.1 x 118.4 x 40.3	88.1 x 118.4 x 40.3
Up-Flow with Hot Gas/Water Reheat	91.1 x 77.4 x 40.3	91.1 x 77.4 x 40.3	91.1 x 77.4 x 40.3	91.1 x 89.1 x 40.3	91.1 x 88.2 x 40.3	91.1 x 89.1 x 40.3	91.1 x 118.4 x 40.3	91.1 x 118.4 x 40.3

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